

REMARKS

Claims 1-6, 9, 10 and 13-26 are now in the application. Claim 3 has been amended to recite that the “two or more species of copolymers having different acid values and the ratio of the acid value of said copolymers is 3 or less”. Basis for this amendment can be found at page 7, lines 24-25 of the specification. Claims 4, 5, 9, 10 and 23 have been amended to recite “are” in place of “may be” for purposes of clarification and not to limit their scope. The amendments to the claims do not introduce any new matter.

The rejection of claims 1-26 under 35 U.S.C. 112, second paragraph, as being indefinite in the use of the term “may be” has been overcome by reciting “are” in place of “may be”.

Claims 1-6, 9, 10, 15, 16 and 23 stand rejected under 35 U.S.C. 102(b) as being anticipated by International Application No. WO 02/096823 to Yamashita. Yamashita does not anticipate claims 1-6, 9, 10, 16, 16 and 23.

Claim 1 relates to a cement admixture (i.e. an admixture for cement) that comprises two or more species of copolymers, and at least one of the copolymers is “a polycarboxylic acid copolymer having a polyalkylene glycol side chain containing an oxyalkylene group having 3 or more carbon atoms”, and further, the content of this copolymer is limited to “70% by weight or larger”.

Yamashita does not anticipate claim 1 since, among other things, Yamashita fails to disclose the requirement of the content of the copolymer of 70% by weight or larger as recited in Claim 1 of the present application. Yamashita merely teaches that the total content of the constituent units (I) and (II) in the polymer (A1) is 70 to 100% by mass, relative to the whole polymer (A1) (please see page 15, lines 8-11).

In contrast, Claim 1 of the present application recites a content of the polycarboxylic acid copolymer having a polyalkylene glycol side chain containing an oxyalkylene group having 3 or more carbon atoms is 70% by weight or larger, relative to the total polymer amount in the cement admixture.

As disclosed in the present specification, when the content of the polycarboxylic acid

copolymer having a polyalkylene glycol side chain containing an oxyalkylene group having 3 or more carbon atoms is low, there is a possibility that dispersity of a cement composition can not be sufficiently improved. Please see page 10, lines 17 to 21 of the specification. Therefore, the content of the copolymer is recited as being 70% by weight or larger in Claim 1.

In Yamashita, there is no disclosure or suggestion about such a cement admixture.

Among the polymers disclosed in Yamashita, only the polymer (C-8) is “a polycarboxylic acid copolymer having a polyalkylene glycol side chain containing an oxyalkylene group having 3 or more carbon atoms”, and, in any examples in which the polymer (C-8) is adopted (i.e., Examples (28), (32), (36) and (40)), the content of the polymer (C-8) is significantly less than 70% by weight (48.3%, 47.1%, 48.5% and 34.5%, respectively, please see Table 9).

This means that the cement admixtures of Yamashita differ substantially from the cement admixture of Claim 1 in the content of the polycarboxylic acid copolymer having a polyalkylene glycol side chain containing an oxyalkylene group having 3 or more carbon atoms. Therefore Yamashita fails to disclose or suggest the features of Claim 1.

Regarding Claim 3, it is urged in the Office Action that Yamashita teaches the polymers of the cement admixture having a molecular weight of 10,000.

However, Claim 3, as now amended, recites “said two or more species of copolymers having different acid values and the ratio of the acid value of said copolymers is 3 or less.” As described at page 7, lines 18-26 of the present specification, if the ratio of the acid value of the copolymers is too large, there is a possibility that dispersity of a cement composition and slump-retaining ability can not be sufficiently improved.

In Yamashita, there is no disclosure or suggestion about such a cement admixture. Yamashita only teaches that the most preferable number of milliequivalents of carboxylic groups is 0.4 to 3.0 (p.15, lines 12-30). Further, in any examples in which the polymer (C-8) is adopted (i.e., Examples (28), (32), (36) and (40)), the ratio of the acid value is significantly larger than 3.0 (4.59, 5.29, 7.24 and 3.62, respectively). Calculation of the acid value is described at page 8, lines 16-34 of the present specification.

Namely, Yamashita does not disclose or suggest the feature of the ratio of the acid value of said copolymers.

Yamashita fails to anticipate the present invention since anticipation requires the disclosure, in a prior art reference, of each and every recitation as set forth in the claims. *See Titanium Metals Corp. v. Banner*, 227 USPQ 773 (Fed. Cir. 1985), *Orthokinetics, Inc. v. Safety Travel Chairs, Inc.*, 1 USPQ2d 1081 (Fed. Cir. 1986), and *Akzo N.V. v. U.S. International Trade Commissioner*, 1 USPQ2d 1241 (Fed. Cir. 1986).

There must be no difference between the claimed invention and reference disclosure for an anticipation rejection under 35 U.S.C. 102. *See Scripps Clinic and Research Foundation v. Genetech, Inc.*, 18 USPQ2d 1001 (CAFC 1991) and *Studiengesellschaft Kohle GmbH v. Dart Industries*, 220 USPQ 841 (CAFC 1984).

Claims 17-22, 25 and 26 stand rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent Publication No. 2003/0199616 to Yamashita et al. in view of U.S. Patent Publication No. 2004/0107876 to Tomita. The cited references do not render unpatentable claims 17-22, 25 and 26. Tomita does not overcome the above discussed deficiencies of Yamashita with respect to rendering unpatentable the present invention.

In view of the above, consideration and allowance are respectfully solicited.

In the event the Examiner believes an interview might serve in any way to advance the prosecution of this application, the undersigned is available at the telephone number noted below.

Application No.: 10/578,574
Reply to Office Action dated July 22, 2010

Docket No.: 21581-00361-US1

The Office is authorized to charge any necessary fees to Deposit Account No. 22-0185, under Order No. 21581-00361-US1 from which the undersigned is authorized to draw.

Dated: November 18, 2010
BAA

Respectfully submitted,

Electronic signature: /Burton A. Amernick/
Burton A. Amernick
Registration No.: 24,852
CONNOLLY BOVE LODGE & HUTZ LLP
1875 Eye Street, NW
Suite 1100
Washington, DC 20006
(202) 331-7111
(202) 293-6229 (Fax)
Attorney for Assignee